

component V genes with an oligonucleotide that encodes an appropriately designed linker peptide, such as (Gly-Gly-Gly-Gly-Ser (~~SEQ ID NO:3~~ SEQ ID NO:2)) or equivalent linker peptide(s). The linker bridges the C-terminus of the first V region and N-terminus of the second, ordered as either VH-linker-VL or VL-linker-VH'. In principle, the scfv binding site can faithfully replicate both the affinity and specificity of its parent antibody combining site.

At page 92, please replace the paragraph beginning on line 20 with the following paragraph:

Prior to library generation, purified DNA can be normalized. DNA is first fractionated according to the following protocol. A sample composed of genomic DNA is purified on a cesium-chloride gradient. The cesium chloride ($R_f = 1.3980$) solution is filtered through a 0.2 μm filter and 15 ml is loaded into a 35 ml OptiSeal tube (Beckman). The DNA is added and thoroughly mixed. Ten micrograms of bis-benzimide (Sigma; Hoechst 33258) is added and mixed thoroughly. The tube is then filled with the filtered cesium chloride solution and spun in a Bti50 rotor in a Beckman L8-70 Ultracentrifuge at 33k rpm for 72 hours. Following centrifugation, a syringe pump and fractionator (Brandel Model 186) are used to drive the gradient through an ISCO UA-5UV absorbance detector set to 280 nm. Peaks representing the DNA from the organisms present in an environmental sample are obtained. Eubacterial sequences can be detected by PCR amplification of DNA encoding rRNA from a 10 fold dilution of the *E. coli* peak using the following primers to amplify:

Forward primer: 5'-AGAGTTTGATCCTGGCTCAG-3' (~~SEQ ID NO:4~~ SEQ ID NO:3)

Reverse primer: 5'-GGTTACCTTGTTACGACTT-3' (~~SEQ ID NO:5~~ SEQ ID NO:4)